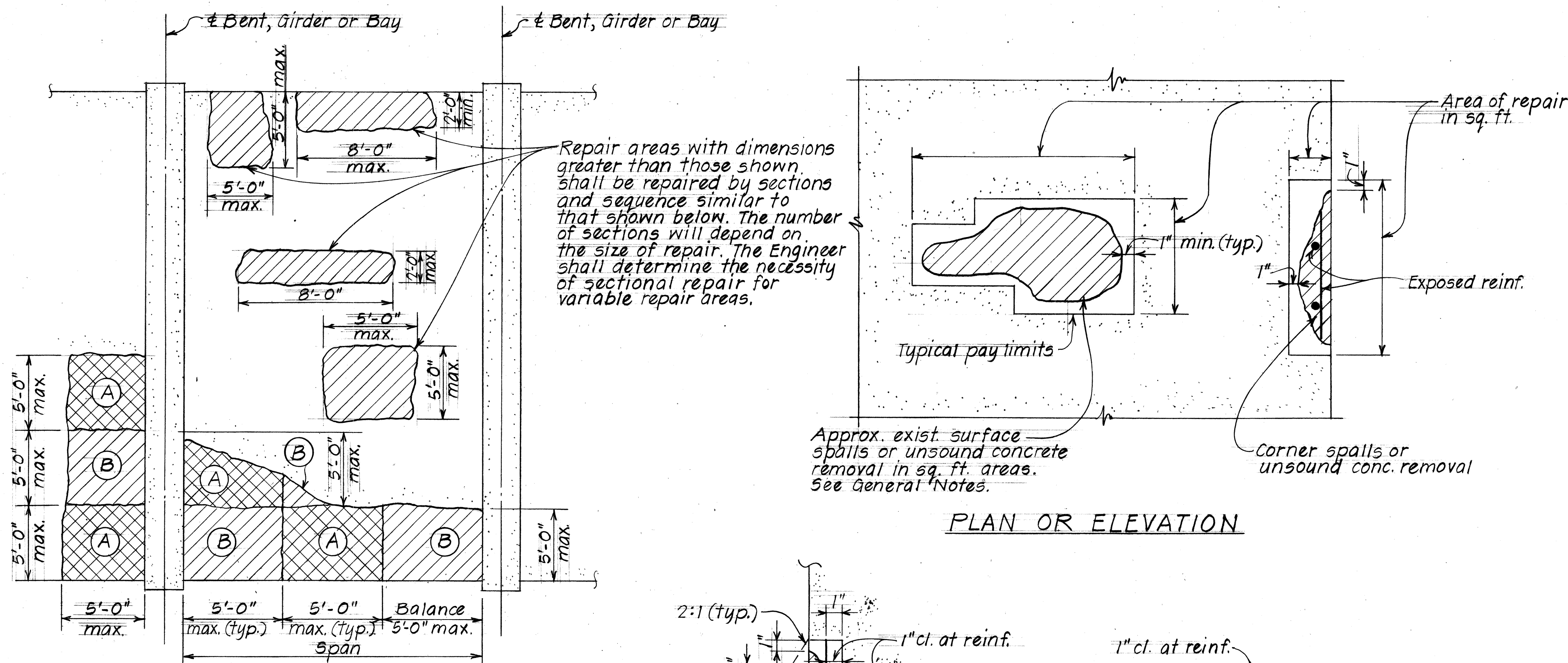
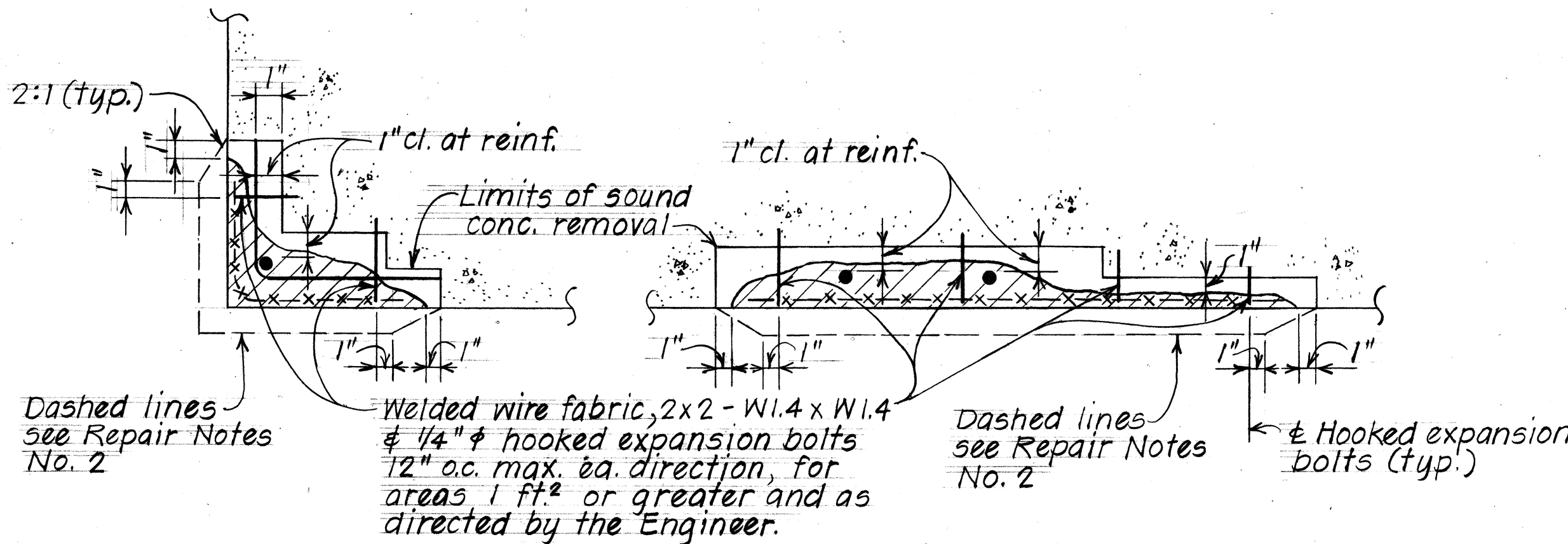


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-01-84M	1984	2	2



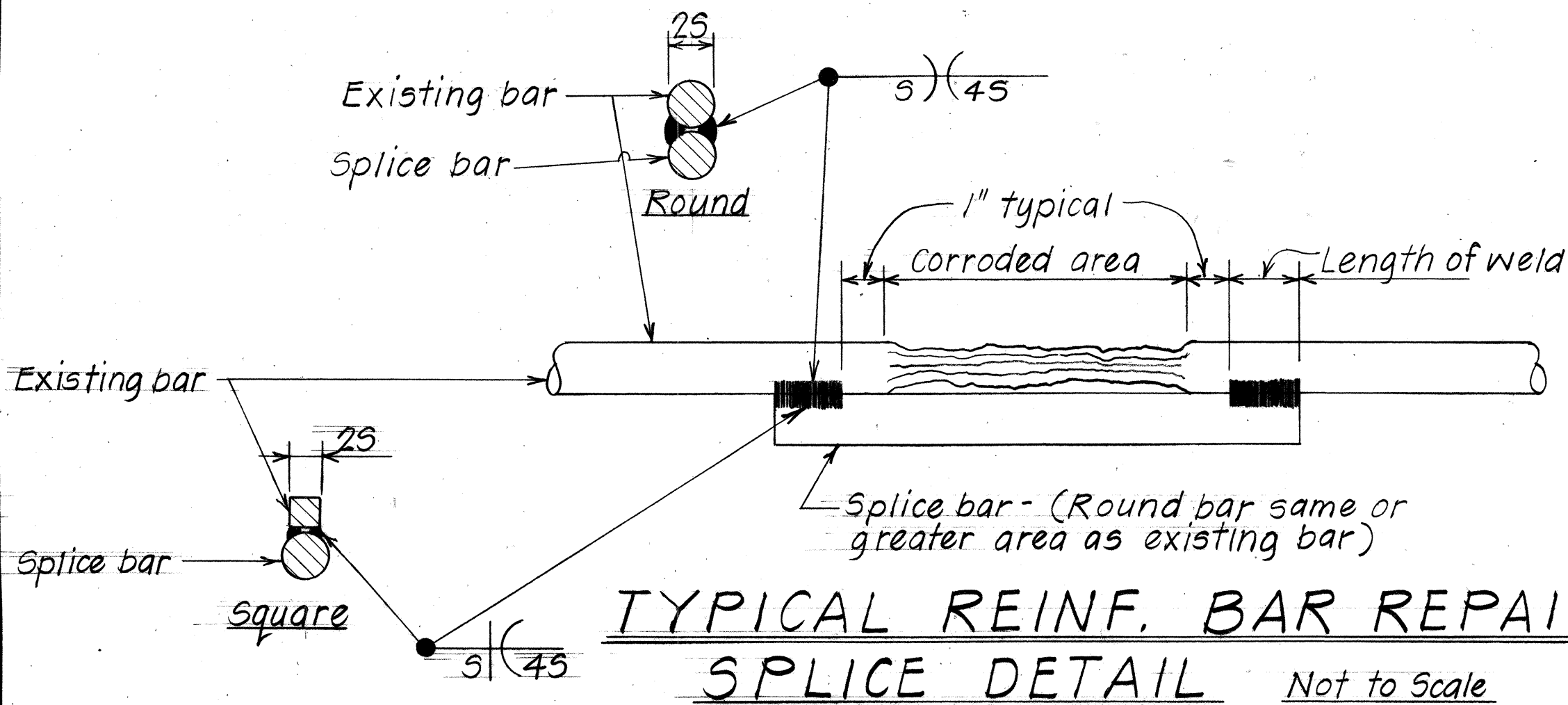
REFLECTED SPAN CEILING PLAN
Not to Scale

NOTE!
Slab damaged over a large area shall be repaired in sections (A) & (B) as shown. The sequence of repair for each section shall be as follows:
1. Repair section (A).
2. Start repair of section (B) 7 days after placing mortar for section (A).
The necessity for sectional repairs will depend on the amount of reinforcing bars that has to be exposed and cleaned. The Engineer shall determine the necessity for sectional repairs after portions of the steel have been exposed.



AT CORNER AT SURFACE
TYPICAL SECTIONS

TYPICAL REPAIRS AT CONCRETE SPALLS
Not to Scale



TYPICAL REINF. BAR REPAIR
SPLICE DETAIL Not to Scale

GENERAL NOTES

REPAIR NOTES:

- Face of exist. concrete. Hatched area denotes approx. damaged area from which loose or unsound concrete has been partially removed. Limits of conc. removal or conc. patch (see detail this sht.). Apply bonding agent immediately before placing mortar or conc.
- All deteriorated, damaged, cracked, spalled, honeycombed concrete or concrete over rusted reinforcing bars shall be removed as shown and repaired with hand placed mortar or shotcrete.
- Provide min. 2" conc. cover over reinforcement or welded wire fabric. See specifications for welded wire fabric requirements.
- Reinforcing bars that have rusted more than 25% of their original cross sectional area shall be strengthened as shown on Repair Splice Detail this sheet.
- Efflorescence shall be inspected and repaired as directed by the Engineer.
- All cracks shall be repaired by applying epoxy under pressure. See Specs.
- The Engineer shall determine all areas to be repaired & the limits of repair at each area.

INCIDENTAL ITEMS

The following items shall be considered incidental to the various pay items of repairs & shall not be paid for separately.

- Expansion bolts & other miscellaneous hardware including hot-dipped galvanized and welded wire fabric.
- Cleaning of all exposed, corroded reinforcing steel to sound metal.
- Reinforcing bars of repair splice for strengthening corroded bars.
- Removal of reinforcing bar ends at Kawaiakeia Bridge.

GENERAL:

- All reinforcing steel to be ASTM A615 Grade 40.
- All welding shall be done in accordance with the Reinforcing Steel Welding Code AWS D12.1.
- Maintenance & control of traffic - see Special Provisions sub-section 104.04 & sub-section 676.03(A).
- Repairs to the underside of slab shall be made in sections & sequences as indicated in note at left.

SYMBOLS & ABBREVIATIONS

Exposed reinf. bars where occurs.
SS. - Surface spall (Concrete)
S.C. - Surface crack (Concrete)
H.C. - Hairline crack
sq.ft.; S.F. - Square feet
L.F. - Linear feet

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

TYPICAL DETAILS

REHABILITATION & REPAIRS

TO BRIDGES

Proj. No. HWY-0-01-84M

Scale: As Shown Date: Feb. 1984

SHEET NO. 2 OF 1 SHEETS

SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
DESIGNED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
NO.	